## Reading Society of Model Engineers

www.prospectpark railway.co.uk

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## The Prospectus

**April 2016** 



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Free to members 50p when sold



Alan Thatcher demonstrates his recently completed Bronze Award winning flame gulper engine at the club meeting on 10th March. See page 10. Photo John Spokes

RAIL PRIVATIZATION 61249 AND WP STYLE
MODEL SHOPS
OLD STUMPY
CHINA VISIT
N GAUGE UPDATE

## DAWSON'S DIARY

## kept by the President

Thursday club night 25<sup>th</sup> February John Spokes gave the members a very good presentation on work on the North Sea oil rigs. Most entertaining. I found very interesting on how the oil rigs are made and built. It seems to be a risky place to be in. You have to have a very strong sense of your own safety to be in a job like that. John put together a very good show. Many thanks from us all.

Good to see John Billard our worthy editor out and about getting better all the time.

Club Young Engineers Day was busy getting on with the Polly Five loco which is moving on apace with the valve gear being fitted. Marcus Bailey ran his loco with much improved performance. It is now fitted with new die blocks. He now had a good lesson in doing some fitting and learnt some useful skills using tools etc. Long may he continue to do so! It was still rather cold on the tracks. A few hardy members ran their engines. One good thing, it was nice and dry.

Mike Manners has designed an electronic track gauge that fits on a driving truck. When in use it records at set distances around the line which can be shown on a pc. This unit makes use of a vernier using just the sensor and the rail it slides on with rollers that run inside the tracks measuring any out of gauge and tight spots etc. A good contender for an article in the ME, Mike?

Mother's Day was a good one for the RSME. It was busy and cold. The members did well coping with the public with only two engines on the ground level with four wagons in use. The raised track was all electric this time out. (That pleased Alf). Everybody did well in such cold conditions. As you may guess the tea bar was flat out keeping the tea on the boil. Thanks to the ladies and gents doing this job. Jim was pleased with the takings this time. We must not forget the younger members who did guard duties all day long. Well done all of you. Steve Harland paid a visit from Up North. This time he had a very nice 5" Britannia. Sadly, it had a problem with the bogie. This loco will be a good runner when Steve finds what is wrong with the springing.

PONDERINGS by 61249

### Network South East 1993 Director of Traction and Rolling Stock

The next four years of working on the railway were for many, especially the management, dominated by things other than the technical aspects that were ostensibly, what our jobs were really about. We were, of course, about to take part in the most fundamental shake up of organisation and ownership that the railways had seen since the grouping of 1923. Maggie had gone, and with her the caution of taking on the public, as well as significant trade unions, with the completion of railway privatisation, or as it had been described, the poll tax on wheels. Instead we had an administration wholly decided that

privatisation was right for the country and the railways, determined to make it happen and to be irreversible by the next election in 1997.

These 4 years were probably the most intense of all my working life, I probably worked every single day, even some while on holiday, as the mobile phone started to make folk accessible to the boss whenever and wherever. And there was much to be done if we were to make a success of whatever came through the politics to us.

I was not close enough to the centre of the political debate to enlighten readers as to who did and said what at the highest levels, my role turned out to be executing the broad plans conceived above, and finding ways to make them work, along with my colleagues and peers in Provincial, Freight, and the Inter-City businesses. Just a few bits of scene setting are worthwhile.

Firstly, my own political views made me interested and excited by the change, rather than resentful or fearful. All my career I had managed decline foisted upon us by an unsympathetic government and public wedded to the car and the lorry, throwing money at the railway intermittently and with interfering strings attached. When the left was in power and the influence of the trade unions waxed high, the folk managing the railway seemed to be an awkward irrelevance.

All this made me convinced that I did not want government telling me exactly what I could and could not buy and fixing the price of everything, and the weaknesses of communism were evident the other side of the Berlin wall. I want the government to do as little as possible as it is generally incompetent, and the market delivers far more customer choice and real competition drives efficiency and lower prices. Government monopolies, like the NHS, become awful political footballs and deliver large organisations that are difficult to manage without the political interference that is part of the territory. A lot of my readers may feel differently, but that is how I approached the privatisation challenge.

Maggie had made a big difference without privatising. She clearly did not rate railways as a mode of transport, nor our management skills - witness her interaction with the BR Board who were told from the end of the table when she paid them a visit the "if any of you were any good, you would be in the private sector". By this time, we were about the most efficient railway in Europe, and events have shown she was pretty wide of the mark. One thing she did achieve apart from the weakening of TU power through the impact of the miners' fiasco, we knew that when the budget was set, she meant it, and there would not be a penny more if we came up short at the end of the year. This drove further efficiency and put a real energy into achieving the financial results that the Sectors committed to. For NSE and train maintenance, this meant taking 15% out of the train maintenance budget each and every year, assisted by the appearance of new trains that meant the old ones needed less done to them. This task, and the sectorisation of management, made



Basingstoke Network SouthEast and red lampposts! Photo Author

those of us in train engineering quite comfortable with change and the management of it.

For us, Sectorisation really had meant fundamental change. My own view is that this was a different culture than that which applied in Civil and Signal Engineering at the time. For them, splitting the railway into business sectors made less sense because their assets were geographically fixed, so a regional or route organisation was logical. The response to changes such as Sectorisation was that they altered the titles on the office door, and carried on with the same job. In signal engineering it was worse as they struggled to shift the organisation away from that which had delivered failure, death and destruction at Clapham Junction. The S&T became very introverted for years after and stoutly withstood any outside influence.

In trains engineering it was different. The Sector Engineers were more important to the depots than the BR Engineering HQ in Derby. Additionally, there were fleet differences that made sense – locos for freight, HSTs for Inter-City, emus for NSE and dmus for Provincial. Just to demonstrate the extent to which the business impact was important - Inter-City were building 140mph MKIVs for ECML electrification, while Provincial were coming up with the Pacer! Some difference! The private sector was already well established in the heavy overhaul and new train markets, in a way that was not true for the infrastructure engineers who still managed and delivered their own modernisation projects in-house.

It is therefore no surprise to me that the least successful part of the privatised

company on a national scale. I can demonstrate this through the safety performance. At a technical level the trains have clearly protected their occupants amazingly well in several serious incidents, with the exception of the class 165 at Ladbroke Grove where the energy levels of a high speed incident were well beyond the capability of modern engineering designs and materials. At Potters Bar, Hatfield, and Grayrigg it was the infrastructure that failed, and its management proved deficient. The results, tragic as they were, were nevertheless limited in terms of injury and fatality, not by miracles, but by good engineering design and delivery of the trains involved.

In 1993 all these traumas were in the future, and we waited with bated breath for privatisation, and its harbinger, the white paper. More excitement next month. (to be continued)

### **MODEL SHOPS**

## by Tony Roberts

Now that Ripmax has closed down all its stores, you are unable to purchase anything from our local Hobby Stores in Oxford Road, Reading. Whilst I expect that most of our members have already made other arrangements, this is just to let you know what other shops and services are available in the local area.

- 1. **Mick Moignard**. Specialises in model locomotive repairs and conversions to DCC, sound and other modifications in quick time and at reasonable prices. His address is No 9, Turnpike, Oakley, Aylesbury, HP18 9QB. Suggest you telephone in the first instance to 07774 652504.
- 2. Time Machine. Run by Nick Baldry, at 32, Westborough Road, Maidenhead, just off the western side of the A4. Telephone 01628 622603. A small well equipped model shop specialised in 00 locomotives and spares, die cast models and spares and kits.
- 3. **Dolls House Models and Hobbies**. Specialising in trains, kits, spares, balsa, and open on Sundays. Old Fire Station, 9 Wargrave Road, Twyford, RG10 9NY telephone 0118-9343700.

I hope you will find this useful.

# NORTH EASTERN LOCOMOTIVE No 825 "Old Stumpy" by John Spokes

Vincent Raven had been Chief Mechanical Engineer of the North Eastern Railway for 2 years when, in 1912, he made a visit to Germany. The reason is not clear, but most likely he was investigating the application of the Uniflow system to locomotive design for while there he took the opportunity to meet with Prof. Johannes Stumpf of the Technische Hochschule in Charlottenberg, near Berlin. Stumpf had been occupied for a few years on improving the uniflow system of steam distribution and at the time of Raven's visit had already

applied his ideas to numerous stationary engines and some locomotives on the Continent and in Russia. This initiative was just one of a number of innovations spanning the last few decades of the pre-grouping years; part of a drive to improve the efficiency of the steam locomotive, bought about to a large extent by the increasing cost of coal.

In a conventional double acting cylinder steam enters and leaves the cylinder at the same end. After exhausting, and at the beginning of the expansion stroke, the cylinder is relatively cool and initially the hot inlet steam gives up part of its heat to the cooler piston and cylinder walls. This may only be a small amount, but when multiplied by the number of strokes in a typical journey the lost energy is not insignificant. Uniflow promised to reduce this loss. In Stumpf's particular arrangement steam is exhausted at the end of the expansion stroke by ports arranged circumferentially around the cylinder. The steam flow is in one direction only, hence the term uniflow, and the temperature profile along the cylinder is, therefore, relatively constant with a consequent reduction in heating and cooling. At the end of the expansion stroke the circumferential exhaust ports are uncovered rapidly by the piston and thus ninetenths of this stroke is involved in expansion while only one-tenth in exhaust. Conversely, when moving in the opposite direction, nine-tenths of the stroke are involved in compression. It is the rapid uncovering of the exhaust ports that creates the pronounced beat of the uniflow locomotive.

The uniflow system leads to a number of technical challenges. Most importantly, the cylinders are very large; to exhaust at the end of each stroke these need to be twice the length of a conventional cylinder with the same stroke. Special consideration needs to be given to the relative diameters of the cylinder bore and piston. Not only is the piston long, but the temperature difference between hot and cold ends results in a variation in bore diameter. There are reported instances of Uniflow engines seizing up, especially when starting from cold. On some engines this problem was avoided by varying the bored diameter between hot and cold ends.

Raven applied uniflow to the last of his S2 4-6-0 class of locomotive. The previous 19 of the class had cylinders 20" dia x 26" stroke with piston valves operated by inside Stephenson's gear. On No. 825, each cylinder was 20" dia x 54" overall and because of their size had to be inclined to accommodate sideways movement of the front bogie wheel. The result was major changes to the front of the locomotive, where the running board, together with the boiler handrail, was raised locally. The front wheel splasher was also reduced. The overall visual effect was most definitely odd and the concept, in the politics of the day, considered somewhat un-British.

To operate the piston valves Raven employed outside Walschaerts valve gear, the first and only time he used this. Even here some innovation was made by adopting a multiplying lever to increase the valve travel for a given movement of the expansion link. Why this was done is not clear, possibly to

avoid using a larger expansion link and or eccentric, which would have required further modifications to the running board and the driving wheel splasher.

At long cutoffs, such as starting, there was insufficient capacity in the circumferential ports to exhaust completely the expanded steam. In this circumstance the piston valve vented steam via an auxiliary port in the valve chest for part of the compression stroke. The short pipes from the front two auxiliary ports can be seen immediately adjacent the valve chests on the front view of the locomotive. In this situation, the working was said to be semi-uniflow. However, at reduced cutoffs full uniflow was achieved. Whether working in semi or full uniflow the valve events could still result in considerable compression of the steam trapped in the cylinder by the returning piston. Stumpf's solution to this was to employ a clearance volume of 16% on No. 825 to avoid compression above the steam admission pressure of 180 psig. To a large extent this volume was created by having concave faces on the piston. At the time this relatively high clearance was the source of some criticism in that it was counterproductive to thermal efficiency. The locomotive was fitted with a superheater even though one of the claimed advantages of the Uniflow system was that this was unnecessary.

The S2 Class were designated mixed traffic locos and typical rosters were express passenger one way with return working on an express goods. No. 825 was used on Scottish expresses and from Newcastle or York to Leeds on the cross-country Liverpool expresses.

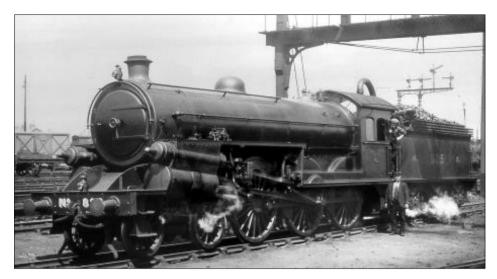
There is limited information on the performance of the locomotive, however, some testing indicated a coal consumption 10% below its class stable-mates. This saving was said to be offset by the increased cost of maintaining this one-off engine. Like the other S2 locos, and the preceding Worsdell S and S1 Classes, No 825 was not an exceptional performer. Collectively they suffered from the insufficient drafting brought about by the rear coupled wheels. The Atlantics, which were the preferred NER express haulers at this time, did not have this disadvantage. Raven was sufficiently encouraged by his experiment to build a second uniflow locomotive, a Class Z1 Atlantic with 3 cylinders and valve chests as a single casting for inside valve gear. The aesthetic lines of this engine were such that at first appearance the uniflow modifications were not apparent.

No 825 left Darlington Works in March 1913 in NER express livery (lined Darlington Green), but immediately after the First World War was repainted unlined Goods Black and retained this for its working life. The Stumpf system was replaced in 1926 with the conventional cylinders, valves and gear used on the rest of the class. The reason for doing this is not known, but probably considerable work needed doing on the original cylinders and valve gear and by this time it may have been more economical to refit standard parts than to renovate what was unique. No 825 was scrapped in 1944 and the last S2 (LNER

My model (see page 10 of the March PROSPECTUS, Ed) was built by the late Jack Pickup and Syd Bennett, both members of the West Riding Small Locomotive Society located at Tingley between Bradford and Wakefield. They built two models simultaneously, The Stumpf, and the other a conventional S2 with inside Stephenson's gear, allegedly to check the difference in







Previous page, above, an oil painting entitled "Heaton 1917" by Sheffield based railway artist Dave Noble of No 825 being prepared by the coaling stages in Heaton depot, Newcastle. Note the employment of women for. manual work during this WW1 period.

Previous page, below, No 825 in NER express livery hauling a Newcastle–Leeds express in 1913, its year of construction. The location is at Low Fell just south of Gateshead.

Above, No 825 in NER goods livery circa 1925/6 just prior to rebuild to a conventional S2. Note in this livery the cabside number has been removed and the number painted on the tender. Illustrations courtesy author.

## N gauge group update

## by Philip Morgan

Due to problematic electrics on the Penzance boards, we have collectively decided to place Penzance aside for now and are now working on designing a new layout using the old Reading boards that were up in the loft.

We are going to try and make an 11 board layout which will utilize some of the other board that we have been building but we will not be basing it on any places so that it can be used for all eras and regions of rolling stock.

If there is anybody that would be interested in assisting us and see what we are doing and the how plans that we are designing are coming along, then we would like to see you on a Wednesday from 6 o'clock till 8.30.

Deadline for the May Prospectus is 18 April. This is the final date. Edited by John Billard 01189340381 john@jegbillard.plus.com



The latest view of the track extension cutting by David Scott

## FLAME GULPER ENGINE

## by Alan Thatcher

This is the seventh of the sixteen stationary engines I have built to date. I first saw the engine on YouTube and decided I would like to build it. Plans were available from the owner and these I purchased. Apart from the flywheels, which were purchased castings, the remainder of the engine was fabricated from "scrap" material.

It is called a flame gulper or flame licker engine and works on the principle that a flame impinges on a port at the front of the cylinder. This flame (hot air) is sucked into the cylinder on the induction stroke via the open port as the piston moves to back dead centre. The port then closes and the hot air cools. The partial vacuum formed by this cooling forces the piston forward towards front dead centre where the port opens exhausting gases and then the cycle begins again (as the induction stroke) using energy stored in the flywheels. The cooling is provided by a water jacket around the cylinder.

The engine was built over the relatively short time-frame of 6 weeks, but some considerable additional effort and time was getting it to function. I originally thought this might be due to a poor seal between the cylinder bore and the piston/piston ring and made a number of modifications in this area. Ultimately, however, the problem proved to be the size of the flame and after much experimenting it finally works very successfully.

# SICHUAN CHINA DURING THE SUMMER OF 2008 by David Scott

My dear wife Lily announced just after Christmas 2007 the holiday dates for our summer. Similar to working valve gear events out on the computer for our models, changing dimensions to make it better or worse? Although some valve gears worked out with pins and card are still some of the best? Well, she put in various dates and out came the results in pounds sterling. This process is repeated until a satisfactory low answer is achieved. "I fly out in April, oh, on your birthday the 6th! And you join us for six weeks on the 16<sup>th</sup> of June." With the family dispatched, I headed for the workshop...only to be reminded later by e-mail, "that various jobs round the house needed a final tweaking." Which is technical for please finish what you started last year. COMPUTERS!

I was soon back on it, and a recent discovery was 'you tube' where you type in for example (2 Chinese locomotive Q J in Jinpeng) and you are rewarded by a short video of them blasting through the landscape in deepest China. It was during one of these sessions that I came across the (Bashi (Shibanxi) railway). In Sichuan Province our Family Holiday destination, uploaded by Rob Dickinson. We share several steam driven interests, and both met our wives in China. "I slightly cheated and used a search engine for mine!

Another computer addiction I have is Google Earth, which is great for following abandoned railways and of course running ones as well. My second attempt found Shibanxi, but only by heading south of Chendu. Then clicking the mouse on a little square by the river. The little squares open up a photo relevant to the area, and are added to by anyone. Now by luck a city called Leshan happens to be on the way, so a something for the family to do was added to the expedition.

I enjoyed Leshan, and the story of the Giant Buda. "It was always there, hidden inside the cliff overlooking the river's coming together. It just needed digging out of the solid rock." Similar to one of our coupling rods hidden within the bar of metal of course. This I contemplated at about 33 degrees C, having climbed down almost sheer steps to the statues feet almost 80 feet down. Yes, the steps just need digging out of the rock, they always there hiding to the side! This was also my only meeting in 5 weeks of anyone from the west. He was sweating buckets having never acclimatized to real heat from his life in air-conditioned transport, house and office back in Dallas Texas.

Opposite our hotel was an always packed cafe, so packed and busy we only ate inside once during the several days we were there. The kitchen that never seemed to get cleaned resembled the inside of a smokebox with flames roaring at various full woks. Lily told me not to look inside. Just enjoy what they made!

The real heat came the next day as we boarded a bus down to Quanwei after

a breakfast of rice soup and peanuts. This had been very funny after my spoon had been needed to feed our baby Katie, yes chopsticks are very useful and great amusement for the other diners. Just don't give me a knife and fork these days as my attempts to use are funny! Even more amusement came to a huge crowd gathered to watch me perform a nappy change after a day of river walks and more food. Chinese nappies can be superbly described as like pulling the pin on your ash pan and letting it drop! A tray to catch is optional. We gave up trying to catch a local bus the next morning, even with two experts in the local dialect in the party. The taxi eventually stopped at the bottom of some stone steps, with me pausing half way up, to visit a very rural communal toilet. This is real China and everyone used them. I tried parting the air with my hands but it didn't seem to make it any better? My contribution adding nicely to the atmosphere.

Over on the left, loco no 9 was made ready for action, while I looked at the dark green painted train. Four wheeled, with hard wooden slatted seats, and metal shutters in case it rained or snowed. No chance in this heat. The C2 project who have imported one of these interesting locomotives have started selling models of these for your garden railway!! 4 trains a day, through all 4 seasons, using 4 steam engines with 8 wheels, so easy to remember. Also easy to remember was it was built in 1959, my date of birth, with 6 tunnels and at just over 19 KM long in narrow gauge 700 mm. This was to transport coal which had been discovered in the 1930s. This it still does with the passenger trains providing extra income and being the only way to get to some of the villages up in the hills.

The first section clings to the valley's side which reminded me of my visit to the Talyllyn Railway during 2004, but transported us back in time to when everything went by rail. Our first town of Jiayang has the track running through the middle, on a raised block built embankment with a black ballasted yard full of very packed coal trucks beyond the dull grey apartment blocks that make up the accommodation.

More people and assorted luggage got on, and the industrial landscape reminding me of my childhood growing up near Manchester, was soon left behind. Now with my father in law wedged in one window with his video camera, Katie propped up by another, and me taking pot luck as to which way the track curved for the next photo. Climbed steadily through the lush green landscape and bright sunshine.

Now in China every square cm is used to grow crops, and I am sure if the sulphur choking tunnels had been bigger and built to standard gauge, would have been lined with growing mushrooms. The first tunnel taking me back to 1963 and a visit to Norfolk from Manchester by train under the Pennines. The C2 Locomotives were in exactly the same run down livery.

The second half of the line is steeper as our locomotive has been working in reverse, and just like the Bishops Castle railway in Shropshire England. Stops

in the middle of nowhere and reverses round to continue the climb now facing forward. This is where we meet our waiting coal train, with the loco having three goes at setting back to get started down the line, or E. R. San, as they say in Mandarin. 1 2 3!

Noisy baskets are unloaded at the next station and a steady view of the landscape is now possible, as we are quite high up. Lily reckons they are chickens. I watch a pig getting off fresh and well exercised with hints of Old Mr Porter and the bus scene. At last the top station of Huang Cun Jing is reached and some interesting 8'x 4' boards are unloaded from the next carriage plus how many passengers sharing the space?

The mining town being squeezed into a very narrow valley with shear tree topped cliffs on the other side from the station. We get dragged back from the front of the train as the engine couples up for the return journey. Dad is feeling his age and his time in the Red Army seems to be catching up with him now. This time going downhill is quite lively and the joys of the digital camera enjoyed on a train intent on jumping off the rough track. "And got it!" a lovely rural scene between two tunnel openings then pitch black again. You don't get lights, or first class, oh and what are they burning in the firebox? The guard watches out for sections of the track and adjusts the brake accordingly. I now get teased as she is very pretty.

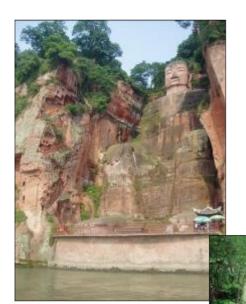
Now Katie shows us that she can sleep anywhere during the day. Strapped into her buggy in the screeching guards coach in the middle. I hold on and Lily has a go with the camera, some of the trees and tree ferns unchanged since the coal deposits were laid down all those years ago.

We got off in the main town, and crunched our way back to civilization, and a slightly cooler café. That was until the lunch arrived. My second test of the day being the sweet corn dish. And I am supposed to be acclimatized to Sichuan food. This matches the power of the local coal!! The third coming quite soon after, during a nappy change. Oops "niao niao!!" I said to the amusement of the next table. It is reassuring just how similar a baby is to a model steam loco when the injector fails to pick up on raised track, or when feeding a moving fire hole door with best quality baby rice. We eventually left for the train noticing damp boot prints on the once cream tiled floor. "Your carbon footprints!" joked Lily.

My cousin and his local wife also totally enjoyed the line several years later but the tourist feel to it had started to creep in. But pigs and furniture are still carried reassuringly.

PS. A C2 locomotive in 3 ½ inch gauge comes out at the size of a Great Western Castle!!!

See pictures on the next page Ed.



Left Carved from the solid

Right below A head count

Below Climbing hard

All photos David Scott





Above Heading home

Below Number nine



# Advanced Notice RSME CIO AGM

Thursday 19th May In the RSME Clubhouse Starting at 19.30

### **WOLVERTON PUG - SALE AND PROGRESS**

The final negotiations between the parties for the sale of Freightliner (1995) Ltd., were held on Friday 24th May 1996. I was on standby for any issues concerning property. The usual form with these things consisted of the two sets of solicitors representing vendor and purchaser locked in the final minutiae leading to an agreement. The vendor's team and the purchaser's team were on standby in nearby rooms in Euston House, ready to respond to anything the solicitors could not answer themselves. In and out we went providing information as requested.

This process dragged on into the night and on into Saturday morning. Finally, when Jamie McKay was of the view the last property issue had been addressed (something to do with the road access at Manchester Trafford Park and a covenant involving a second access and Manchester United Football Club, I seem to recall!) at 04.20 he released me from the gathering and I retired to the Euston Plaza Hotel. I awoke sometime about 09.00 and found a note pushed under my door signed by Jamie saying that Freightliner (1995) Ltd had been sold to MCB Ltd. at 07.20 Saturday morning.

So off we went into the private sector. The new executive team duly took over and those not remaining with Freightliner (1995) Ltd., departed, including Jamie MacKay and my boss Iain Dewar. From now on I reported to the Development Director, one John Williams. I got on very well with John and we soon established a very good working relationship. For a while I handled issues concerning the Railways Act, 1993, including obtaining the company's Freight Operating Licence for £250, until Bob Goundry was appointed as Company Secretary and took over that role, as I had enough to look after with the property portfolio.

Sometimes though I still received questions regarding the interpretation of the 1993 Act and if I was not sure would discuss the point with Bob and between us we would deliberate. When the Act was drafted and made law it was done with such indecent haste, it required another Statutory Instrument to tidy up some anomalies. This wonderful piece of legislation was entitled "The Railways (Class and Miscellaneous Exemptions) Order 1994. Without it the original Act was so all encompassing that even a track on which a camera was running on a film set would require a licence and be subject to access rights controlled by the Rail Regulator!

John was rather 'gung ho', which I liked, because it meant things got done. Though I earned his respect and if I counselled caution he would usually listen. Sometimes he would wave his hand saying don't worry we'll sort it out, if there is a problem. The problem was usually handling the Managing Director! He was not a tall man and had a steely gaze which came from a determination to get what he wanted! Prior to our monthly Property Meetings, John and I would spend a morning drawing up the agenda (I was the Secretary of the Property Forum). We would go through the previous set of minutes, sorting

out matters arising and new items for discussion. We spent some time trying to second guess which items the MD would jump on to make an issue of. This modus was a way of keeping his team permanently on the tips of their toes! One thing was certain he would find some issue and come round the wicket at you. Like the famous occasion when we were about to demolish the old Victorian Goods Shed in Basford Hall Yard at Crewe to make way for a new fuelling point. The Chief Engineer had found a firm who would demolish the building and clear the site for nil cost on the basis of what he would get for the recycled Victorian bricks and wooden beams.

On explaining this plan to the MD, which John and I thought would be very well received, since it was at nil cost, he paused, took a cigarette from the packet on his desk, lit up, and leaned forward in our direction, "Have you looked at conversion into flats? These old properties are selling for huge sums for conversion" After a long tirade about an opportunity missed, we moved on to the next item.

If you have never walked round a container terminal, the first time you do so will be memorable. A vast area of open land, laid out with concrete, usually a one-way road system leading from the road entrance round to the crane roads. These consist of overhead cranes, usually two, running on their own rails over two or more rail tracks and a roadway between.

The overhead cranes lift the containers from train to lorry and vice versa. So lorries, loaded and empty come in and go out the same way. There are two storage areas for containers. For loaded and empty.

Customers pay for loaded storage but normally empty storage is part of the package and they pay for each lift of their container. The storage areas could be up to 7 high. i.e. 7 boxes on top of each other. Plying between these storage areas and the loading area beside the cranes are to be found a number of huge rubber tyred machines known as reach stackers. The first time I came upon one of these I heard a loud roaring sound and round the corner of a stack of 7 high containers careered one of these carrying a 40-foot container. The drivers are doing this every day, and speed is of the essence to get the boxes onto the trains in good time for their departures. I thought I was in Jurassic Park and nipped smartly out of the monster's way! Hard hats must be worn on the terminals, but I imagine they would not do a lot for you if a container landed on your bonce! The containers were either 20 feet, 30 feet or 40 feet long, though these days most are 40 feet.

One of John's big projects was the development of a new larger terminal at Cardiff to replace the existing facility at Pengam and provide an International Terminal handling Channel Tunnel Traffic. The deal involved a complicated land swop, utilising the Pengam land and a similar sized area behind it owned by the British Railways Board (Residuary) Ltd., in exchange for land ripe for development at Wentloog, between Cardiff and Newport. Part of this land had previously been used as sidings during the war. All this adjacent to the South

Wales Main line. Endless meetings were held with the various parties and their solicitors, chaired by the Welsh Development Agency. One difficult issue that came up concerned a bridge across the four track main line on which ran a lane leading from Marshfield to the Wentloog Levels grazing land. This bridge had been partly demolished at the Levels end by Railtrack, until it was pointed out to them that certain people had a right of access over it, and there may be more. In true fashion Railtrack had ceased the demolition and had sat back waiting for any complaints. An adjacent farm had complained, even though they had not been using the lane. Railtrack paid them some compensation and they went away happy.

Our lawyers then set about an in depth search, bearing in mind this bridge would lead right into the middle of the crane roads at the new terminal. Two or three more people were unearthed who had access rights and they were paid off. Lawyers being lawyers then pointed out that there was always the chance there might be further people with access rights of which we knew nothing. We took out an insurance for the princely sum of £9,872, which would be nothing compared with a legal injunction to re-instate the lane!

The terminal was duly built, and opened, Pengam was sold for housing and no more was heard from any sheep drovers demanding access at Wentloog. (*To be continued*)



A reach stacker at Wilton

All photos WP



All photos WP

Below Leeds Stourton Freightliner depot

Above A new crane beam at Wentloog new terminal

Below The "bridge" at Wentloog



#### **DIARY**

6		
2nd	Birthday party	11.00-13.30
3rd		13.30-dusk
4th	Special needs	13.30-16.00
5th		19.30
9th		11.00
10th		11.00-13.30
	• 1	14.30-1700
11th	Trustees meeting	
16th	Birthday party	14.30-1700
17th	Birthday party	11.00-13.00
	3 1 3	14.30-1700
19th	00 gauge DCC	19.30
23rd		Seats still available
29th	Young Engineers	18.00-20.00
30th		11.00-13.30
		13.30
	0 0	
1st	Public running	13.30-dusk
3rd	00 gauge layout	19.30
7th	Club running	11.00
8th	Birthday party	11.00-13.30
9th	Trustees meeting	
12th	Fish and Chip night	
14th	Birthday parties	11.00-13.30
	• •	14.30-17.00
15th	Birthday parties	11.00-13.30
	• •	14.30-17.00
17th	00 gauge DCC	19.30
19th	CIO AGM	19.30
t– 22nd	Doncaster MEX	
21st	Birthday parties	11.00-13.30
	• •	14.30-1700
22nd	Birthday parties	11.00-13.30
	• •	14.30-1700
27th	Young Engineers	11.00-13.30
		13.30
29th	Autistic Pride Day	11.00-16.00
30th	Public Running	11.00
	2nd 3rd 4th 5th 9th 10th 11th 16th 17th 23rd 29th 30th 1st 3rd 7th 8th 9th 12th 14th 15th 17th 21st 22nd 21st 22nd 27th 29th 30th	2nd Birthday party 3rd Public running 4th Special needs 5th 00gauge layout 9th Club running 10th Birthday parties  11th Trustees meeting 16th Birthday party 17th Birthday party 17th O0 gauge DCC 23rd Trip to Hendon 29th Young Engineers 30th Birthday party Young Engineers 1st Public running 3rd 00 gauge layout 7th Club running 8th Birthday party 9th Trustees meeting 12th Fish and Chip night 14th Birthday parties  15th Birthday parties  15th Birthday parties  17th 00 gauge DCC 19th CIO AGM 1-22nd Doncaster MEX 21st Birthday parties  27th Young Engineers Club running 29th Autistic Pride Day

Information correct at time of printing Please check the clubhouse calendar for any updates